

## SUPERFAMILY GNATHOPHORA.

Jaw present.

I. Orifices of genitalia contiguous or united *Monotremata*.

II. Orifices of genitalia widely separated; no shell; mantle covering the whole upper surface *Ditremata*.

The *Monotremata* divide naturally into two divisions:

1. Lateral teeth of the aculeate or thorn-shaped type *Vitrinea*.

2. Lateral teeth of the quadrate type *Helicea*

1. Families of *Vitrinea*.

a. All of the teeth aculeate *Selenitidæ*.

b. Central and lateral teeth quadrate, uncini aculeate *Limacidæ*  
*Selenitidæ*.

This family is not very distinct from *Limacidæ*, but the radula is more highly specialized. Of the genus *Selenites* numerous varieties and forms have been described since the publication of my check-list. They will be enumerated later.

*Limacidæ*.

All attempts to split this group into two or more families have proved impracticable. The various genera exhibit every stage in the degeneration of the shell. The presence or absence of a caudal mucus gland is equally unreliable, for genera otherwise closely allied, vary in this character.

The additions to our *Limax* list being unimportant will be deferred.

Additional species of *Zonites*.

*Z. Shimekii* Pilsbry. Loess formation of Iowa and Nebraska.

*Z. Simpsoni* Pilsbry. Indian Territory.

---

A NEW SPECIES OF ARCONAIA.

---

BY H. A. PILSBRY.

---

*Unio* (*Arconaia*) *Provancheriana* sp. nov.

Shell wide, oblong, beaks at the anterior third. The whole shell twisted, very strongly resembling *Arca* (*Parallelopipedum*) *tortuosa* L., in the direction and degree of the twist. Hinge-line sigmoid. Anterior and posterior margins rounded; basal margin gently

curved, sigmoid; epidermis strong, olive-brown with a few darker concentric streaks; concentrically striate, nearly smooth. The left valve has a slight ridge extending from the beaks to the posterior extremity. Cavity of the left valve very shallow, of the right valve deeper; naere purplish flesh-colored. The left valve has two widely separated cardinal teeth, lateral teeth remote from cardinals, double; right valve with single cardinal and lateral teeth. Height 32, width  $53\frac{1}{2}$ , thickness 18 mill.

The specimen is said to be from China. It is from the collection of l'abbé Provancher, Cap Rouge, Quebec.

The ends are not produced as in *A. contorta* Lea, nor is the shell bow-shaped like that species. It can be compared with none other known to me.

---

[CONTRIBUTED.]

AMERICAN ASSOCIATION OF CONCHOLOGISTS.

---

FEBRUARY 23, 1891.

---

Since our last announcement the following new members have been enrolled:

139. E. R. Mayo,<sup>1</sup> Boston, Mass. *Massachusetts Mollusca.*

140. R. T. Shepherd, Piqua, Ohio. *Unionidae.*

141. Elwood Pleas, Dunreith, Ind. *Indiana Mollusca.*

142. Hale Montgomery, Clinton, Mo.

Nearly all of the North American Conchologists and many Palaeontologists are now enrolled in the Association, the progress of which has been very gratifying. The members are taking advantage of their privileges to correspond with each other, and much special study has been accomplished. Several of the members have undertaken the preparation of lists of species, similar to the list of Haliotidae recently published by the President. A list of the American Cypraeidae (fossil and recent) is now ready, but for want of room, will not appear until next number. Several other lists are approaching completion and we trust that it will not be long before we have complete lists of all North American mollusks.

*The United States Collection.*

The collection of United States shells, now being formed by the members is growing very rapidly. Many species have been added

---

<sup>1</sup> Deceased since his election.